First nest of Dusky Purpletuft *Iodopleura fusca*, from French Guiana

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The three species of canopy-dwelling purpletufts Iodopleura were long considered part of the Neotropical family Cotingidae (Snow 2004). However, morphological (Prum & Lanyon 1989) 'and genetic data (Chesser 2004, Barber & Rice 2007, Tello et al. 2009) indicate that Iodopleura should be placed in the Tityridae. Dusky Purpletuft I. fusca is a rare to uncommon endemic of the Guianan Shield, from east and south-east Venezuela and the Guianas to adjacent Brazil north of the Amazon and east of the Rio Negro (Restall et al. 2006, Whittaker & Kirwan 2008, Green & Kirwan in prep.). In French Guiana, it is uncommon albeit widespread in the vast forests of the interior, e.g. near Saut Pararé and Petit Saut, around Saül, along the Piste de Saint Élie, at the Pic du Croissant, in the Massif des Emérillons and the Réserve Naturelle des Nouragues (Tostain et al. 1992). In 1994–96, I. fusca was regularly observed at Saint-Eugène, a field research station of the Muséum National d'Histoire Naturelle (Paris) on the Courcibo River, 30 km south of the Petit Saut hydroelectric dam (O. Claessens pers. comm.). In 2006–09, the species was regularly seen at the Centre de Coopération Internationale en Recherche Agronomique pour le Développement research station at Paracou near Sinnamary, and along the dirt road to the Crique Dardanelles through the Forêt de Petit Saut in the Montagne de Fer (O. Claessens & A. Renaudier pers. comm.). More recently, it has also been observed in the Réserve Naturelle de la Trinité (S. Uriot pers. comm.). However, because of its tiny size and unobtrusive behaviour high in the forest canopy, the species probably often goes undetected.

Recently, Whittaker & Kirwan (2008) published new natural history data for all three *Iodopleura*. They described the nesting of White-browed *I. isabellae* and Buff-throated Purpletufts *I. pipra*, but the nest of Dusky Purpletuft was unknown.

On 27 December 2008, P. Ingremeau, R. Monchâtre and AV observed, and AV photographed, a pair of Dusky Purpletufts in the sparsely foliated canopy of a *c*.20-m high tree at the forest edge, along the Piste de Counamama, a broad dirt road through the Forêt



Figure 1. Female Dusky Purpletuft *Iodopleura fusca* constructing its nest, Piste de Counamama, French Guiana (Alexandre Vinot)

Figure 2. The Dusky Purpletuft *lodopleura fusca* nest looks very inconspicuous, almost like a bump on the bark of a horizontal, bare branch, on 27 December 2008, Piste de Counamama, French Guiana (Patrick Ingremeau)

de Tamanoir near the Counamama River ($05^{\circ}17'N$, $53^{\circ}17'W$). The male (violet pectoral tufts) was quite vocal. On checking the photographs subsequently, JI noted that the female (white pectoral tufts) was constructing a tiny, cone-shaped nest (Fig. 1) on the horizontal part of a bare branch with a diameter of *c*.25–30 mm, in the outer tree crown, a few metres below the top. The nest apparently straddled the branch, where a small knothole was present, and was very inconspicuous, almost like a bump on the bark (Fig. 2). Its top and bottom had estimated diameters of *c*.30 and *c*.45 mm respectively, and its height was *c*.25 mm. When observed, the female was adding what appeared to be a cobweb to the outside of the nest.

On 1 January 2009, the pair was again seen nest building. Apparently the female alone constructed the nest, but was always accompanied by the male. Visiting the nest tree on 19 January 2009, AV thought that the nest was complete. The base appeared slightly broader than three weeks earlier, but no Dusky Purpletufts were seen. On 27 January, AV found that the original nest had disappeared. Bad weather in the first half of January, characterised by heavy rainfall and high winds, might have been the cause. However, the female was starting to build a new nest in exactly the same place and was seen arriving with vegetable matter, which was fixed to a thin pad of material, the base of a new nest. Due to heavy rains in February–March the dirt road became impassable, and the second nest's fate is unknown. However on 1 April, the upper part of the nest tree was broken down.

The small dimensions of the nest cup, with a diameter of *c*.30 mm and a depth <25 mm, are striking compared to the body size of a Dusky Purpletuft, which is *c*.12 cm (Restall *et al.* 2006), but presumably relate to the presumed clutch size of one egg as in other purpletufts (Snow 2004, Whittaker & Kirwan 2008, Green & Kirwan in prep.).

Based on Whittaker & Kirwan (2008) and our observations, we conclude that the nest sites and nests of the three purpletufts are very similar. The nest is constructed on a small horizontal branch, sometimes where it forks or radiates, between *c*.10–30 m high in an open-crowned tree. Spider's web seems to predominate as nest material. However, fresh lichens, fungus fibres and vegetable (seed?) matter are also reported as nesting material. Excrement, sticky mistletoe seeds and probably saliva are used to 'cement' the nest, which recalls that of a hummingbird.

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References:

Barber, B. R. & Rice, N. H. 2007. Systematics and evolution in the Tityrinae. Auk 124: 1317–1329.

Chesser, R. T. 2004. Molecular systematics of New World suboscine birds. Mol. Phyl. & Evol. 32: 11-24.

Green, G. & Kirwan, G. M. In prep. Cotingas and manakins. Christopher Helm, London.

Prum, R. O. & Lanyon, W. E. 1989. Monophyly and phylogeny of the Schiffornis group (Tyrannoidea). *Condor* 91: 444–461.

Restall, R., Rodner, C. & Lentino, M. 2006. Birds of northern South America. Christopher Helm, London.

Snow, D. W. 2004. Family Cotingidae (cotingas). Pp. 32–108 *in* del Hoyo, J., Elliott, A. & Christie, D. A. (eds.) *Handbook of the birds of the world*, vol. 9. Lynx Edicions, Barcelona.

Tello, J. G., Moyle, R. G., Marchese, D. J. & Cracraft, J. 2009. Phylogeny and phylogenetic classification of the tyrant flycatchers, cotingas, manakins, and their allies. *Cladistics* 25: 429–467.

Tostain, O., Dujardin, J.-L., Érard, C. & Thiollay, J.-M. 1992. Oiseaux de Guyane. Société d'Études Ornithologiques, Brunoy.

Whittaker, A. & Kirwan, G. M. 2008. Natural history data for the canopy-dwelling purpletufts *Iodopleura* (Cotingidae), and first documentation of Dusky Purpletuft *I. fusca* for Brazil. *Bull. Brit. Orn. Cl.* 128: 28–35.

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